

Application No. 09/867,227

### REMARKS/ARGUMENTS

Claims 15-19, 21-24, 34, and 35 are pending. Favorable reconsideration is respectfully requested in light of the Remarks below.

At the outset, Applicants thank Examiner Dicus for further explaining the Office's position in the last Office Action.

The rejection of Claims 15-19, 21-24, 34, and 35 under 35 U.S.C. §103(a) over US Patent No. 5,605,750 (US'750) and/or US 6379,780 (US'780) is traversed below. The below traversal of the outstanding rejection is organized by first reviewing the claimed invention and the prosecution history thus far. Further, a review of the disclosures of US'950 and US'780 follows. Finally, a presentation of how both US'950 and US'780 fail to disclose or suggest anywhere therein all aspects of the claimed invention is provided. This presentation is simply related to the crosslinked microbeads disclosed in both US'950 and US'780, demonstrating that such crosslinked microbeads are simply not crosslinking agents as defined by the state of the art and as recognized by the skilled artisan. Accordingly, the presentation demonstrates that while the claimed invention requires the presence of a crosslinking agent, US'780 and US'950 both fail to disclose the presence of a crosslinking agent whatsoever; thereby failing to disclose or suggest each and every element of the claimed invention and satisfying the Office's burden of establishing a *prima facie* case of obviousness.

The present invention relates, in part, to products having a microporous coating containing a cross-linking agent, at most 90 parts of colloidal inorganic particles (or submicron inorganic particles); and at least 10 parts of a polymeric binder, where the weight percentage of colloidal inorganic particles (or submicron inorganic particles) is greater than the weight percent of polymeric binder (see Claims 15, 34 and 35). Claims 15 and 34 relate to an ink receiving medium containing this coating. Claim 35 relates to the microporous coating itself. Claim 34 further relates to situations where the colloidal inorganic particles are replaced with submicron inorganic particles.

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At best, US'750, discloses a media having a coating on one side of a film. US'750 does disclose the optional use of microbeads made from crosslinked PMMA. US'750 fails altogether to disclose the claimed invention because US'750 fails altogether to disclose or suggest a coating and/or ink receiving medium containing a cross-linking agent. Accordingly, US'750 fails to disclose all claim limitations of the claimed invention, much less create a prima facie case of obviousness. Accordingly, the Office has relied upon US'780 to allegedly provide what US'750 fails to disclose and/or suggest.

At best, US'780, discloses an imaging support having a polyester bottom layer and a permeable upper layer. US'780 discloses that such layers may contain microbeads made from crosslinked polymers, such as methyl methacrylate-containing polymers. However, US'780 fails altogether to disclose a coating contains a cross-linking agent, at most 90 parts of colloidal inorganic particles; and at least 10 parts of a polymeric binder. Accordingly, US'780 fails to disclose and/or suggest the claimed invention.

During prosecution, the Office has relied on US'750 as the primary reference. Until recently, the Office has alleged that because the US'750 discloses a microporous coating containing colloidal inorganic particles, a binder and crosslinked polymethyl methacrylate (PMMA), then the US'750 discloses a coating containing inorganic particles, a binder and a crosslinking agent. Applicants have contended that such allegations are incorrect because the crosslinked PMMA may not be crosslinked with a crosslinking agent, but rather a photo-induced crosslinking that does not utilize crosslinking agent functionality. Further, the Office has set forth another ground of rejection alleging that while US'750 fails to disclose that the crosslinked PMMA contains a crosslinking agent, US'780 demonstrates that methyl methacrylate containing polymers may contain crosslinking agents because such polymers may be used in crosslinked polymethyl methacrylate. In the outstanding Office Action, the Office has further alleged that 1) US'780 discloses that a crosslinking agent used in crosslinked PMMA yields excellent ink-receiving properties; 2) Applicants latest arguments are not subjects claimed in the currently pending claims; and 3) crosslinked PMMA of US'750 will not be destroyed by using the crosslinked PMMA and crosslinking agent of US'780.

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Applicants first respectfully traverse the Office's rejections and allegations on the basis that the Office's interpretation of US'780 is incorrect. Again, the Office alleges that 1) US'780 discloses that a crosslinking agent used in crosslinked PMMA yields excellent ink-receiving properties. This is certainly not that case. In fact, US'780 discloses that voids in the top permeable layer of its coated substrate are important (see Column 3, lines 9-13 of US'780). Further, US'780 discloses that microbeads present in the top permeable layer are essential to create the proper voids necessary for overall performance (see Column 4, lines 23-26 of US'780). Still further, the microbeads of US'780 are polymers that are preferably crosslinked (see Column 4, line 32, and Column 10, lines 24-25, of US'780). Columns 5, 6, 7, 8, and 9 of US'780 discuss various methods of making the microbeads to be used in the top permeable layer of the image recording element disclosed therein. In light of all of the above, it is clear that the US'780 discloses that a crosslinking agent is merely a preferable means to create microbeads; and, that the top permeable layer must contain the microbeads so as to create the proper void network necessary for excellent ink-receiving properties of the image recording element disclosed therein. The use of a crosslinking agent to crosslink polymeric monomers for the formation of microbeads is disclosed in US'780, but the crosslinking agent is not essential to overall performance. Rather, the microbeads are essential (see Column 12, lines 10-27). In fact, the polymeric monomers are crosslinked first to create the microbeads, and then the microbeads are dispersed in a mixture of molten continuous matrix polymer to create the top permeable layer (See US'780 at Column 11, lines 31-54). At no time does US'780 disclose or suggest adding crosslinking agent to the top permeable layer. If the Office maintains its rejection, the Office is respectfully requested to help Applicants by directing their attention to the specific reference within US'780 that discloses a crosslinking agent is added to the top permeable layer of the image recording element disclosed therein.

In light of the above, since US'780 fails to disclose adding crosslinking agent to the top permeable layer, then it merely describes commonly known methods of making crosslinked polymeric beads and completely fails to provide what US'750 lacks.

Applicants secondly respectfully traverse the Office's rejections and allegations on the basis that the Office's interpretation of Applicants' arguments in the Response dated September 27, 2006, is incorrect. The Office alleges that Applicants previous arguments are

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related to limitations not in the claims. Applicants respectfully submit that the Office's position is incorrect. First, the pending claims require the presence of a crosslinking agent in the microporous coating, not a crosslinked microbead such as crosslinked PMMA. Second, crosslinked PMMA is not capable of crosslinking anything, while a crosslinking agent (as required in the pending claims) is a chemical entity that crosslinks at least two polymeric chains (see previous responses and scientific evidence supporting Applicants position). The Office responds to all of the evidence set forth by Applicants to support Applicants position by merely hand-waiving a conclusion that Applicants arguments are not limitations of the claims. Applicants are not characterizing Applicant's claims, but rather arguing that it is completely impossible for crosslinked PMMA to be a crosslinking agent. To support Applicants position, Applicants have directed the Office's attention to disclosures within US'780 (regarding the creation of the crosslinked microbeads) that demonstrate it is impossible for such microbeads to contain residual crosslinking agent (and thus no crosslinking agent is added to the top permeable layer of US'780). Applicants arguments are not based upon the amounts of crosslinking agent present in the microporous coating of the claimed invention (as the Office alleges), but rather are based on the fact that the pending claims require a crosslinking agent to be present in the claimed microporous layer. Disclosures within US'780 completely prohibit that from ever occurring. If US'780 fails to disclose that a crosslinking agent is added to the top permeable layer of US'780, then US'780 fails to disclose what US'750 lacks.

Applicants finally respectfully traverse the Office's rejections and allegations on the basis that the Office's conclusion that crosslinked PMMA of US'750 will not be destroyed by using the crosslinked PMMA and crosslinking agent of US'780 is not only irrelevant, but also a misinterpretation of US'780 and Applicants arguments. To clarify, Applicants do not and have not argued that the crosslinked PMMA of US'750 will be destroyed by using the crosslinked PMMA and crosslinking agent of US'780. All of applicants arguments and evidence set forth have been submitted to demonstrate that the microbead of US'780 that is made by crosslinking polymeric monomer (note that the creation of the microbead is completed prior to the microbead being added to the coating in either US'750 and/or US'780) does not/can not carry any crosslinking agent functionality when added to a microporous coating and/or top layer. Applicants are arguing that the crosslinking agent functionality is

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completely destroyed in the creation of the microbead (according to US'780 itself) prior to the microbead being added to the top layer of US'780. Therefore, Applicants are arguing that since the microbead (made according to US'780) does not contain any crosslinking agent functionality, then US'780 fails altogether to provide a crosslinking agent in its top layer. Accordingly, Applicants are arguing that US'780 fails to provide what US'750 lacks, i.e. a disclosure or suggestion that a crosslinking agent is added to a microporous coating layer. The Office has not provided any evidence to the contrary of Applicants' position thus far.

In light of all of the above, neither US'750, nor US'780 disclose or suggest that a crosslinking agent is added to a microporous coating layer. In fact, US'750 and US'780 merely disclose the addition of a microbead made of crosslinked polymer (such as PMMA) to a top layer. A microbead of crosslinked polymer (such as PMMA) is not a crosslinking agent. To the contrary, the claimed invention requires the presence of a crosslinking agent in a microporous coating. Therefore, US'750 alone or combined with US'780 fail to disclose or suggest each and every limitation of the claimed invention. Accordingly, the Office has failed to build a *prima facie* case of obviousness based upon the combination of US'750 and US'780. Because the Office has failed to bear its burden of establishing a *prima facie* case of obviousness based upon the combination of US'750 and US'780, the requirement of comparative data is premature.

A common theme to all of Applicants' reasons for traversing the outstanding Office Action is as follows: US'750 and US'780 do not disclose or suggest adding a crosslinking agent to a top and/or coating layer of an image recording media; however, these references do disclose adding microbeads containing crosslinked polymers to various layers of image recording media. While these microbeads may be made by crosslinking polymeric monomers together, these final microbeads added to the various layers do not have any crosslinking agent functionality; and thus, can not crosslink anything. It is the Applicants' position that if the Office is going to maintain a rejection over the claimed invention, the Office bears the burden to demonstrate that such microbeads (such as crosslinked PMMA in US'750 and/or the microbeads made according to US'780) contain crosslinking agent functionality. Otherwise, the Office has not met its burden of establishing a *prima facie* case

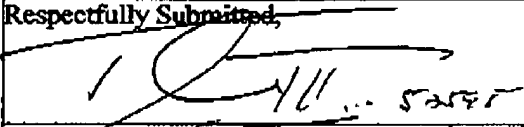
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of obviousness because Applicants have already demonstrated that such functionality can not be inherent in past responses to past Office Actions.

In light of all of the above, Applicants respectfully request that the Office withdraw all grounds of rejection.

Applicants respectfully submit that the present application is now in condition for allowance. Favorable reconsideration is respectfully requested. Should anything further be required to place this application in condition for allowance, the Examiner is requested to contact below-signed by telephone.

Please charge the amount of \$2230.00 required for the request for extension of time to our Deposit Account No. 09-0525. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 09-0525. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time.

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